## II

## RESEARCH DESIGN

## A. PROBLEM ORIENTATION AND RESEARCH CONTEXT

This chapter presents a discussion of the research design that was developed to guide the data gathering, analysis, and interpretative efforts of the study. The research design was structured to address general information needs, or themes, that are widely used in historic archaeology. These themes include treatment of the dead, landscape studies, rural lifeways, and intrasite patterning. An important element of the project research design is the application of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716).

Over the past several years, Delaware has developed archaeological resource management procedures according to the Secretary of the Interior's Standards and Guidelines, and these procedures are applied for all archaeological work conducted according to the requirements of Section 106 of the National Historic Preservation Act. The Secretary's Standards and Guidelines establish a process for organizing information in such a way as to provide a sound basis for decisions concerning the identification, evaluation, and treatment of cultural resources. The process begins with the creation of historic contexts that define the conceptual framework for a set of resources, or property types, that share a thematic or topical unity as well as relatively well-defined geographic distribution and temporal limits. After the definition of historic contexts, the process is made operational by addressing cultural resource management issues. These issues may be grouped into the three broad areas of (1) identification, (2) evaluation, and (3) protection or treatment. The primary issues relating to *identification* include establishing what kinds of resources (property types) are associated with each context and determining the geographic distribution, relative frequency, and current condition of these property types.

Issues relating to *evaluation* are those that can establish whether or not a particular property is important or possesses significance relative to the criteria of eligibility for inclusion in the National Register of Historic Places. In order to apply these criteria to archaeological properties, it is necessary to define information needs or research topics that represent important knowledge about each context. A decision that a specific property can increase knowledge about a particular historic context must rest on the argument that the property possesses an appropriate level of physical integrity and that it contains the requisite data or information potential.

The third major decision area pertains to the appropriate *treatment* of cultural resources. Issues that relate to treatment or protection are relevant only to those properties that have been determined to be historically significant (i.e., eligible for inclusion in the National Register of Historic Places). Questions that need to be addressed in order to determine appropriate treatment strategies include an assessment of what uses enhance the significant aspects of various resource types, what land uses are incompatible with preservation, and how many representatives of each property type are available.

The Delaware State Historic Preservation Office (formerly the Bureau of Archaeology and Historic Preservation) has sponsored development of a series of planning studies that pertain to historic archaeological properties in general, as well as a few fully developed individual historic contexts. The initial Comprehensive Historic Preservation Plan (Ames et al. 1989) established the basis for use of the Secretary's Standards and Guidelines, including a description of the resource management process and a discussion of the state's major chronological periods, geographic zones, general historical development, and general preservation priorities. This initial plan also

established a matrix model for creation of historic contexts, wherein historic contexts were defined by a combination of three variables: historic themes, chronological periods, and geographic zones. The Historic Context Master Reference and Summary (Herman et al. 1989) was developed as a companion study to the Comprehensive Plan. The Historic Context Master Reference and Summary elaborated the matrix model and defined historic contexts according to 18 historic themes, 5 chronological periods, and 4 geographic zones. Individual contexts were not fully developed, in that they generally lacked key elements such as a thematic statement, a justification of their geographic and temporal limits, a discussion of information needs, descriptions of associated property types, integrity requirements for property types, and recommended treatment strategies for individual property types.

Another statewide planning study specifically addressed Delaware's historic archaeological resources (De Cunzo and Catts 1990). By adopting the five basic chronological periods, the Management Plan for Delaware's Historic Archaeological Resources expanded upon the initial Comprehensive Preservation Plan but discarded the original 18 themes, replacing them with four research domains: (1) domestic economy, (2) manufacturing and trade, (3) landscape, and (4) social group identity, behavior, and interaction. The Historic Archaeological Resource Management Plan provided a discussion of previous and current research in historic archaeology and associated disciplines as well as recommendations for full development of certain key historic contexts. Individual contexts were subsequently developed for the archaeology of agriculture and rural life (De Cunzo and Garcia 1992, 1993).

The property under investigation is a rural family cemetery that was probably used during the late eighteenth century. There are no historical records associated with the property that would clearly identify its temporal position, but the available archaeological evidence (artifact dates), and historical information (ownership and occupation) points to a period of use between 1752 and 1799, a span which covers the Intensified and Durable Occupation (c. 1730-1770) and Early Industrialization (c. 1770-1830) periods, as defined in the state's historic resource management planning framework (Ames et al. 1989; Herman et al. 1989). The property lies within Delaware's Lower Peninsula/Cypress Swamp Zone. In the Historic Context Master Reference and Summary (Herman et al. 1989), cemeteries are considered to be properties associated with the Religion theme. However, as a specialized area within a family farm, the rural family cemetery property type crosscuts as many as four of the historic themes in the Comprehensive Preservation Plan: 1. Agriculture; 11. Settlement Patterns and Demographic Change; 12. Architecture, Engineering, and Decorative Arts; and 14. Religion. The primary association of this property type is with the Religion theme; therefore, rural family cemeteries should be evaluated according to the information they contain about people's beliefs in the afterlife and treatment of the dead. Secondarily, these properties provide information about rural historical landscapes, distribution of specialized activity areas within farmsteads, and historic rural lifeways

At present, no historic contexts have been developed that are relevant to the archaeological identification, evaluation, and treatment of rural family cemeteries in Delaware. Archaeological excavations of cemeteries are infrequent, although it is notable that the first archaeological excavation of an historic site in Delaware was the Crane Hook Cemetery, a family burial ground used from the mid-eighteenth to the early nineteenth century (De Cunzo and Catts 1990; Weslager 1968).

During the Intensified and Durable Occupation period (c. 1730-1770) and the Early Industrialization period (c. 1770-1830), settlement in the Lower Peninsula/Cypress Swamp Zone remained non-nucleated, and the landscape was dominated by family farms. Specialized activity or functional areas are listed as property types in the Agriculture context, while rural farms and specialized farm outbuildings are listed as property types under the Settlement Patterns and Demographic Change context. However, cemeteries associated with family farms have not been recognized as a distinct property type in the Comprehensive Historic Preservation Plan (Ames et al.

1989), so that the existing preservation plans are of limited use for decisions regarding the identification, evaluation, and treatment of such properties.

The Management Plan for Historic Archaeological Resources provides, with its discussion of general research domains, a framework for discussion of the historical significance of this resource type. As an element of a farmstead, the family cemetery at Site 7S-F-68 can provide information about the historical development of the rural landscape. During Delaware's Industrialization/Early Urbanization period (c. 1830-1880), family cemeteries fell into disuse and most individuals were buried in local churchyard cemeteries. Beyond its general significance as an element of the rural agricultural landscape, the cemetery can provide information regarding the individuals who lived and worked on the farmstead that historically encompassed Site 7S-F-68. Physical examination of the skeletal remains, assuming good preservation, also can provide information regarding the ethnicity, age, sex, and pathologies of the deceased individuals. Cemeteries typically contain important information pertaining to social values; specifically, the physical aspects of the interments, including the burial furniture, the orientation of the bodies, and the accompanying goods, provide a physical record of historical attitudes toward life and death.

## B. RESEARCH METHODS

Lacking specific formal procedures for the treatment of rural cemeteries in the various state preservation planning documents, the methodology for this study was developed according to current practice in historical archaeology. This section provides an outline of the research methods; more detailed discussions of the research methodology are contained in the subsequent chapters dealing with the site's historical context, field excavations, artifact analysis, and skeletal analysis.

Development of the site's historical context included a general history of Sussex County, to provide the cultural context within which use of the cemetery occurred. In order to provide information about the identity of the deceased individuals, site-specific historical research was directed toward establishing the ownership and occupation of the property, . A review of archaeological literature pertaining to cemetery studies was also completed, in order to obtain information regarding rural family cemeteries, including their physical characteristics, geographical distribution, and changes through time.

Excavation of the cemetery was carried out according to a work plan designed to complement the program for prehistoric data recovery at Site 7S-F-68. First, the five burials identified during the preceding Phase III fieldwork were excavated; then the topsoil and pavement were stripped from adjacent areas to identify additional burial features. As a result of this operation, four additional human burials were exposed, and these features were excavated immediately after exposure. Artifact analyses focused on the material that was directly associated with the burials and was oriented toward establishing dates of interment and other aspects of mortuary behavior. Analysis of the human skeletal material was completed by a consulting physical anthropologist. This analysis focused on the determination of age and sex as well as health status, activity patterns, and pathologies, as permitted by the condition of the material.